

Case Western Reserve University School of Law Scholarly Commons

Faculty Publications

2021

A Paradigm Shift in Comparative Institutional Governance: The Role of Contract in Business Relationships and Cost/Benefit **Analysis**

Juliet P. Kostritsky Case Western University School of Law, juliet.kostritsky@case.edu

Follow this and additional works at: https://scholarlycommons.law.case.edu/faculty_publications



Part of the Contracts Commons

Repository Citation

Kostritsky, Juliet P., "A Paradigm Shift in Comparative Institutional Governance: The Role of Contract in Business Relationships and Cost/Benefit Analysis" (2021). Faculty Publications. 2120. https://scholarlycommons.law.case.edu/faculty_publications/2120

This Article is brought to you for free and open access by Case Western Reserve University School of Law Scholarly Commons. It has been accepted for inclusion in Faculty Publications by an authorized administrator of Case Western Reserve University School of Law Scholarly Commons.

A PARADIGM SHIFT IN COMPARATIVE INSTITUTIONAL GOVERNANCE: THE ROLE OF CONTRACT IN BUSINESS RELATIONSHIPS AND COST/BENEFIT ANALYSIS

JULIET P. KOSTRITSKY*

Introduction		85
Choice in Governance (In Five Parts)		87
A.	Comparative Cost Analysis3	91
B.	Institutional Choice and Comparative Governance: How	
	Informal and Formal Enforcement Interact and Combine3	94
C.	Implication of Paradigmatic Institutional Choice:	
	Functional Focus of Exchange	96
D.	Private Governance: Facts, Origins, Examples, Purposes,	
	and Limits3	97
E.	A Renewed Interest in Norms4	-00
Three More Effects Beyond the Institutional Choice Paradigm4		
		-02
A.	More Realistic Model of Exchange4	-02
B.	Context, Institutional Choice, and Contract	
	Interpretation4	-03
C.		
	Paradigm4	-06
Conclusion		07
	Cho A. B. C. D. E. Thr Para A. B.	Choice in Governance (In Five Parts)

INTRODUCTION

Written while teaching at the University of Wisconsin Law School, Professor Stewart Macaulay's 1963 article, *Non-Contractual Relations in Business: A Preliminary Study*,¹ revolutionized contracts scholarship by highlighting that contract was only one variable among others that parties

^{*} Everett D. and Eugenia S. McCurdy Professor of Contract Law, Case Western Reserve University School of Law. Bob Gordon, Bill Whitford, and Stewart Macaulay have been wonderful teachers and mentors. David Campbell, Brian Bix, and Mitu Gulati provided valuable insights. Jilly Fox and Alexa Shook rendered marvelous research assistance.

^{1.} Stewart Macaulay, *Non-Contractual Relations in Business: A Preliminary Study*, 28 Am. Socio. Rev. 55 (1963).

could choose to govern exchange.² His work led to a paradigm shift away from a world where contract law was a self-contained, effective, and costless way of regulating exchange to a world where comparative institutional governance determines when parties rely on contract and when they use alternate institutions.³ Macaulay's businesspeople relied on the alternate institution of informal adjustment without legal coercion.⁴

Macaulay's focus on institutional choice⁵ influenced scholarship in several ways. First, it implicitly suggested that a cost comparison strategy underlies institutional choice. Second, once this richer world of informal enforcement emerged as a way to manage exchange, scholars were inspired to study the ways in which firms combine informal and formal enforcement. Third, by focusing on the functional goals driving parties' choice of governance, Macaulay reoriented contract law away from pure doctrine. He also encouraged contract design theorists to consider how institutional mechanisms within contracts (but not oriented to performance obligations or sanctions) could solve durable problems in exchange. This reconceptualized contract law. Fourth, by focusing on informal adjustment as an institutional choice, Macaulay's work not only inspired studies of private governance as a fact⁶ but also caused scholars to explore why

- 2. *Id.* at 56. The idea of choice has played a large role in economics because "[e]conomics throughout the twentieth century ha[ve] been developed predominantly as a science of choice." Oliver E. Williamson, *The Theory of the Firm as Governance Structure: From Choice to Contract*, 16 J. ECON. PERSP. 171, 172 (2002). Choice developed as a response to scarcity. But new perspectives pushed contract and private governance as an alternative to markets. Private governance emphasizes "different kinds of transactions with discrete modes of governance in an economizing way." *Id.* at 175. This choice in governance has roots in Macaulay. *See* Elizabeth Mertz & Lawrence M. Friedman, *Law in Reality, Law in Context: On the Work and Influence of Stewart Macaulay, in STEWART MACAULAY: SELECTED WORKS 15, 23 (David Campbell ed., 2020) (suggesting that economists studying Macaulay believe that parties are making "choices, on efficiency grounds, of particular modes of enforcement").*
- 3. His work contributed to the rich scholarship of new institutional economics. See, e.g., Oliver E. Williamson, The New Institutional Economics: Taking Stock, Looking Ahead, 38 J. ECON. LITERATURE 595 (2000). The study of institutional economics may have begun with Ronald Coase: "It is commonly said, and it may be true, that the new institutional economics started with my article, 'The Nature of the Firm' (1937) with its explicit introduction of transaction costs into economic analysis." Ronald Coase, The New Institutional Economics, 88 AM. ECON. REV. 72, 72 (1998).
- 4. Macaulay did not envision a world without the impact of law, since law could influence settlements and disputes. *See* Macaulay, *supra* note 1, at 62; *see also* Barak D. Richman, *Norms and Law: Putting the Horse Before the Cart*, 62 DUKE L.J. 739, 744 (2012) (situating the private governance of Macaulay within the "shadow of the law").
- 5. Robert Gordon noted a political aspect to the conflict among institutions, noting that Macaulay "sees common law contract courts as simply one among the many institutional battlegrounds on which the parties carry on their struggle." *See* Robert W. Gordon, *Macaulay, Macneil, and the Discovery of Solidarity and Power in Contract Law*, 1985 Wis. L. Rev. 565, 573.
- 6. Robert W. Gordon, Is the World of Contracting Relations One of Spontaneous Order or Pervasive State Action? Stewart Macaulay Scrambles the Public-

private ordering arose, the preconditions for success, and the possibility of failure (suggesting the limits of private governance). Fifth, Macaulay's work led to a burgeoning field exploring customs as purposive, non-legal solutions to problems, sparking inquiries into how law, customs, and contract coexist to solve exchange problems.

Macaulay's work makes three other major contributions, each of which is important itself, but that also tie into this paradigm shift. These contributions include: First, Macaulay's insight that parties choose informal governance over contract because of cost (broadly conceived) revealed a world of other transaction costs and frictions that led to a more realistic model of human behavior and exchange. This influenced scholars to assess their effects as impediments to complete contracting and possible institutional solutions. Second, Macaulay's law-in-action focus on context matters for two reasons: it determines which institution can best solve exchange problems and also suggests that courts should adopt a less formalistic approach to contract interpretation and gap-filling. Third, his focus on institutions outside contract law suggests that lawyers must assume a broader role that goes beyond contract drafting for allocating risks and performance.

I. CHOICE IN GOVERNANCE (IN FIVE PARTS)

Macaulay's vivid real-world examples in which businessmen avoid one institution (contract) and embrace another (informal adjustment)¹⁰ sparked scholars in different fields to consider why and when parties would embrace a variety of institutions to govern their exchange.¹¹ After Macaulay, a formal contract would no longer be viewed as an inevitable necessity for governing exchange, but rather as one of many institutions

Private Distinction, in REVISITING THE CONTRACTS SCHOLARSHIP OF STEWART MACAULAY: ON THE EMPIRICAL AND THE LYRICAL 49, 59 (Jean Braucher, John Kidwell & William C. Whitford eds., 2013).

- 7. See, e.g., DOUGLASS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE 16 (1990) (exploring the "underlying determinants of human behavior, the costs of transacting, and the makeup of institutions").
- 8. See Brian H. Bix, The Role of Contract: Stewart Macaulay's Lessons from Practice (discussing context to include "assumptions that we do not articulate, operating just underneath our beliefs about the world"), in REVISITING THE CONTRACTS SCHOLARSHIP OF STEWART MACAULAY: ON THE EMPIRICAL AND THE LYRICAL, supra note 6, at 241, 247.
- 9. Lisa Bernstein & Brad Peterson, Managerial Contracting: A Preliminary Study 9 (2020) (unpublished manuscript) (on file with author).
- 10. This focus on informal governance is part of "an effort to implement the 'study of good order and workable arrangements,' where good order includes both spontaneous order in the market, which is a venerated tradition in economics . . . and intentional order[.]" Oliver E. Williamson, *The Economics of Governance*, 95 Am. Econ. Rev. 1, 1 (2005).
- 11. Oliver E. Williamson, *The Economics of Governance: Framework and Implications*, 140 J. Institutional & Theoretical Econ. 195, 195 (1984).

that parties could choose to use. This led to a choice in institutional governance and a change in perspective, causing economists to wonder, "why do we observe so much organizational variety[?]" Macaulay's illumination of this sort of thinking about institutional choice made a seminal contribution. The 1,311 citations to Macaulay powerfully demonstrate that.

Moreover, Macaulay's study of informal adjustment opened up the world of institutions in exchange and contributed to the development of new institutional economics. It prompted North, Ostrom, Smith, Greif, Dixit, and others to study the purposes institutions serve, ¹⁵ as well as how institutions guide behavior, ¹⁶ lower the cost of exchange, ¹⁷ and enhance economic performance. ¹⁸

The focus on institutions that Macaulay prompted changed economists' views of the production economy. Previously, economists resisted studying institutions in assessing the costs of a production economy despite Coase's insight that "when it is costly to transact, institutions matter." Economists had accepted firms and organizations as

- 12. *Id*.
- 13. Perhaps the success of Macaulay's approach can be best explained by Ken Arrow, who sees the new institutionalists as successful in a way that the older institutionalists were not because of their willingness to tackle "why economic institutions [have] emerged the way they did and not otherwise[.]" Williamson, *supra* note 3, 596 (quoting Kenneth J. Arrow, *Reflections on the Essays, in* ARROW AND THE FOUNDATIONS OF THE THEORY OF ECONOMIC POLICY 734 (George R. Feiwel ed., 1987) (alteration to match original)).
- 14. *Macaulay, Stewart*, HeinOnline, https://heinonline-org.ezproxy.library.wisc.edu/HOL/AuthorProfile?action=edit&search_name=Macaulay% 2C% 20Stewart&collection=journals (last visited Apr. 14, 2021). Of course, not only did Macaulay's work influence others, but there was cross pollination as well. *See, e.g.*, Stewart Macaulay, *Freedom from Contract: Solutions In Search of a Problem?*, 2004 WIS. L. REV. 777, 778–91 (discussing his admiration for Robert Scott's work). As Mitu Gulati points out, other legal scholars may not have had the same influence on economics scholarship. Email from Mitu Gulati, Professor of L., Duke Univ. Sch. of L., to author (Dec. 20, 2020, 8:03 AM) (on file with author).
- 15. Juliet P. Kostritsky, Everett D. & Eugenis S. McCurdy Professor of Cont. L. & Dir. of the Ctr. for Bus. L., Case W. Rsrv. Univ. Sch. of L., Panel Discussion at the *Wisconsin Law Review* Symposium: Wisconsin's Intellectual History and Traditions (Oct. 23, 2020) (transcript on file with *Wisconsin Law Review*), https://youtu.be/d8q2VNBToE0 [https://perma.cc/X87A-S3JF].
 - 16. *Id*.
- 17. North concluded that institutions act as a means to reduce uncertainty and provide "constraints [that] reduce the costs of human interaction." NORTH, *supra* note 7, at 25, 36.
 - 18. *Id.* at 133–35, 137.
- 19. *Id.* at 12 (citing Ronald H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 15 (1960)).

the product of technology²⁰ and economies of scale.²¹ Macaulay's insights into institutional choice deviated from the view that "the distribution of economic activity across firm and market organization [was accepted] as given" and "coordinated by . . . price[.]"²² His work on institutional alternatives thus encouraged the new institutional economists to focus on how parties choose to organize their economic exchanges in order to coordinate their economic activity within and across firms.²³

Macaulay's idea of institutional choice also led economists, using the structure of comparative usefulness that he pioneered, to explore the boundaries of the firm in new ways.²⁴ They identified a new institutional choice in which firms abandoned contract as a governance mechanism and embraced vertical integration.²⁵ Economists who focused on the problems and characteristics of parties and of the transaction, including opportunism, looked at institutional choice and concluded that vertical integration might solve problems of opportunism better than external contracts when bounded rationality, sunk costs, and opportunism converged.²⁶ Thus, under certain circumstances, the parties might avoid contract altogether and opt for vertical integration.²⁷

Oliver Williamson followed Macaulay in comparing institutions, but instead of assessing contract sanctions and informal adjustment, Williamson contrasted market and hierarchy, while also considering bargaining impediments and transactional characteristics like sunk costs. While a market transaction might work well in a setting where goods can be examined before purchase, as buyers and sellers entered long-distance sales, precluding pre-sale examinations, opportunistic delivery of

^{20.} Williamson addressed claims that "technology is determinative of economic organization" but disputes them and explains the boundaries of the firm in terms of "economizing on transaction costs." Williamson, supra note 10, at 10, 15.

^{21.} Naomi R. Lamoreaux, Daniel M. G. Raff & Peter Temin, *Beyond Markets and Hierarchies: Toward a New Synthesis of American Business History*, 108 AM. HIST. REV. 404, 405 (2003) (citing Alfred D. Chandler, Jr., The Visible Hand: The Managerial Revolution in American Business 8 (1977)).

^{22.} Williamson, *supra* note 10, at 3 (citing Ronald H. Coase, *The Nature of the Firm*, 4 ECONOMICA 386, 387 (1937)).

^{23.} *Id*

^{24.} The Chandlerian view of the firm explained the boundaries of the firm in terms of technology and economies of scale. Lamoreaux, Raff & Temin, *supra* note 21, at 405 (citing CHANDLER, *supra* note 21, at 8–9).

^{25.} NORTH, supra note 7, at 53.

^{26.} OLIVER E. WILLIAMSON, THE ECONOMIC INSTITUTIONS OF CAPITALISM: FIRMS, MARKETS, RELATIONAL CONTRACTING 66-67 (1985).

^{27.} NORTH, supra note 7, at 53.

^{28.} See Mark Granovetter, *Economic Action and Social Structure: The Problem of Embeddedness*, 91 AM. J. SOCIO. 481, 488, 493–94 (1985), for a discussion on and critique of Williamson's arguments regarding economic transactional costs between market and hierarchical firms and suggesting a neglect of "social relations."

substandard goods needed to be controlled. The institution of hierarchy provided advantages in controlling these sorts of quality problems.²⁹

The paradigm shift toward analyzing exchange and problem solving in terms of institutional choice led Elinor Ostrom to conduct a granular analysis of what institutions are best suited for managing common pool resources.³⁰ Traditionally, economists assumed that government was needed "to impose rules and taxes to force self-interested individuals to contribute[.]"³¹ But by studying water systems, Ostrom discovered that a range of private, governmental, and community organizations could succeed "when well matched to local settings and involving the active participation of local users."³² Ostrom identified "structural factors" that could explain the successful management and cooperation for public goods through non-public institutions.³³

The focus on institutional choices for governing exchange also influenced scholars to explore what institutions should govern modern production. Modularity, which companies use to

break[] up a complex system into discrete pieces—which can then communicate with one another only through standardized interfaces within a standardized architecture—[to] eliminate what would otherwise be an unmanageable spaghetti tangle of systemic interconnections.³⁴

Modularity can be explained as an institutional choice for governing production.³⁵ But, modularity as an institutional choice became less popular as it became apparent that modularity kept companies from innovating—they had to limit innovations that would not work with the standard interfaces.³⁶ Thus, institutional choice was governed by a cost comparison of the relative advantages and disadvantages of modularity.

Macaulay's recognition of institutional choice led other scholars to explore what factors could make alternate institutions—such as network governance—work when some elements—such as trust or social capital—

^{29.} Lamoreaux, Raff & Temin, supra note 21, at 408.

^{30.} See Elinor Ostrom, Beyond Markets and States: Polycentric Governance of Complex Economic Systems, 100 Am. Econ. Rev. 641 (2010); North, supra note 7, at 6, 26.

^{31.} Ostrom, *supra* note 30, at 642.

^{32.} *Id.* at 663–64.

^{33.} Id. at 642.

^{34.} Richard N. Langlois, *Modularity in Technology and Organization*, 49 J. ECON. BEHAV. & ORG. 19, 19 (2000).

^{35.} See id.

^{36.} *Id.* at 26.

were absent.³⁷ In short, he opened up a whole world of alternative governance. By studying the preconditions for the success of informal governance in relational contracts, Macaulay led scholars to see that firms could provide the same kind of information transmission through a party's position in a network, "reduc[ing] the need for firms to employ costly governance mechanisms."³⁸

Macaulay's work on how relational contracts might function in one setting led subsequent scholars to examine how the same kinds of information transmission mechanisms characteristic of relational contracts could succeed in a different setting through information transmission in a network.³⁹ Macaulay explored what characteristics of relational contracts made informal governance possible; that insight led others to explore how those characteristics could be created with different institutions.⁴⁰

A. Comparative Cost Analysis

Implicit in Macaulay's institutional choice paradigm is a cost comparison strategy for determining other choices, including how to organize a firm, whether to make or buy products, and how to structure contracts. ⁴¹ If contract law as a coercive sanction fails to serve the parties in an exchange and is therefore dysfunctional, parties may turn to informal enforcement depending on the relative advantages and disadvantages of doing so. ⁴²

That insight—that parties would adopt private strategies to achieve their goals when the costs of one type of institution outweighed the advantages—influenced design choices made in the supply chain, 43

^{37.} See, e.g., Lisa Bernstein, Beyond Relational Contracts: Social Capital and Network Governance in Procurement Contracts, 7 J. LEGAL ANALYSIS 561, 576 (2015).

^{38.} *Id.* at 599.

^{39.} See id.; Ostrom, supra note 30; NORTH, supra note 7; see also Macaulay, supra note 1.

^{40.} *See* Macaulay, *supra* note 1; Bernstein, *supra* note 37, at 599; Ostrom, *supra* note 30; NORTH, *supra* note 7, at 6, 36.

^{41.} Implicit in Macaulay's work is a cost minimization paradigm which prefigures current studies in neuroscience of the brain's reaction to cost minimization tools. *See* Colin Camerer, George Loewenstein & Drazen Prelec, *Neuroeconomics: How Neuroscience Can Inform Economics*, 43 J. ECON. LITERATURE 9, 48–49 (2005).

^{42.} See, e.g., Stewart Macaulay, Elegant Models, Empirical Pictures, and the Complexities of Contract, 11 L. & Soc'y Rev. 507, 509 (1977) (He used a cost benefit analysis in examining the use or non-use of contract (litigation) in the following statement: "that economic actors will employ the litigation process to settle disputes only to the extent that (1) the present value of continuing relationships is low, and (2) the anticipated return from the litigation process is high."), cited in David Campbell, What Do We Mean By the Non-Use of Contract?, in Revisiting the Contracts Scholarship of Stewart Macaulay: On the Empirical and the Lyrical, supra note 6, at 159, 168.

^{43.} The costs Macaulay defined included damage to the relationship, reduced flexibility, and litigation costs. Macaulay, *supra* note 1, at 64.

Williamson's discriminating alignment thesis,⁴⁴ and Komesar's work on choosing between imperfect alternatives.⁴⁵

In the supply chain, governance choices and a comparative cost analysis explain how parties select what type of contract will govern their relationship. Some parties opt out of using long-term agreements (LTAs) in certain contexts while opting to use them in others. Empirical data suggests that parties opt in more frequently when there are large sunk costs involved. The LTA may be adopted only if the benefits outweigh the costs. Suppliers calculate that, where large sunk costs are present, the LTA protects those investments and that that protection outweighs the negative, onerous provisions of an LTA.

Comparative cost analysis can also explain new governance choices in innovation contracts. Although Matthew Jennejohn rationalizes new governance provisions as providing an architecture necessary for solving "multivalent" problems—such as institutionalizing learning and preventing entropy—Jennejohn's theory also explains governance provisions as a cost-minimizing way to avoid entropy. Where coordination problems are complex, the provisions to institutionalize learning can "keep the joint learning process moving on track." Parties use these devices to get the most out of resources. By devising processes like benchmarking, simultaneous engineering, and error detection, parties in innovative manufacturing can lower the costs of production and even identify new sources of value. Therefore, they are preferable under a comparative cost analysis.

Macaulay's comparative cost approach to institutional choice influenced scholars studying the design choices of parties in the global supply chain. Parties implement proactive institutions such as benchmarking and simultaneous engineering⁵² when they offer more advantages than an ex post inspection process.⁵³ Alternative systems, such

^{44.} *See infra* p. 393 and note 55.

^{45.} *See infra* p. 393 and notes 58–61.

^{46.} See Juliet P. Kostritsky & Jessica Ice, Why Choose LTAs? An Empirical Study of Ohio Manufacturers' Contractual Choices Through a Bargaining Lens, 9 Am. U. Bus. L. Rev. 337, 337 (2020).

^{47.} *Id.* at 357.

^{48.} *Id.* at 338.

^{49.} Matthew Jennejohn, *The Private Order of Innovation Networks*, 68 STAN. L. REV. 281, 313 (2016).

^{50.} Matthew C. Jennejohn, *Collaboration, Innovation, and Contract Design*, 14 STAN. J.L. BUS. & FIN. 83, 144–46 (2008).

^{51.} Bernstein, *supra* note 37, at 565.

^{52.} Id

^{53.} See Bernstein & Peterson, supra note 9, at 39.

as ones where manufacturers discover problems only when the assembly lines shut down because of a defective piece, would be more costly.⁵⁴

The comparative cost analysis of institutional choice underlies Williamson's discriminating alignment thesis. Under his theory, parties will "align transactions (which differ in their attributes) with governance structures (which differ in their costs and competencies) in a discriminating (mainly transaction cost economizing) way." Macaulay directly influenced Williamson by linking institutional choice to the relative advantages and disadvantages of an institutional choice. Williamson further explored how the confluence of bounded rationality, sunk costs, and opportunism would interfere with contractual solutions, giving other institutional solutions a comparative cost advantage. 57

This comparative cost approach led Neil Komesar to stress that, in assessing solutions to a problem, such as an externality problem, the costs and benefits of different institutions must be examined comparatively to see which imperfect institution would prevail. ⁵⁸ This comparative analysis further examines whether the market, the courts, or the legislature would be best equipped to solve the problem. ⁵⁹ When analyzing this issue, Komesar looks at the impediments to contractual solutions, including information, the number of participants, and how the benefits or stakes were distributed. ⁶⁰ Komesar then assesses these factors in different institutional settings. ⁶¹ The comparative approach also influenced Williamson's remediableness approach, but he is generally assessing market solutions against hierarchy and ruling out judicial solutions. ⁶²

Finally, comparative cost assessment influenced Barak Richman to assess the relative costs of private legal systems and public courts.⁶³ Although private legal systems enjoy certain adjudicative cost advantages over public court systems, public court systems enjoy enforcement advantage costs.⁶⁴ Richman argues that some of the costs of private legal systems have been ignored, including the fact that private enforcement is

^{54.} *Id.*

^{55.} OLIVER E. WILLIAMSON, MECHANISMS OF GOVERNANCE 46–47 (1996) [hereinafter MECHANISMS OF GOVERNANCE]; see also Williamson, supra note 10, at 6 ("A predictive theory of economic organization resides in the hypothesis that transactions, which differ in their attributes, are aligned with governance structures, which differ in their costs and competencies, so as to effect a (mainly) transaction-cost-economizing result.").

^{56.} MECHANISMS OF GOVERNANCE, *supra* note 55, at 12.

^{57.} Id. at 6, 12.

^{58.} NEIL K. KOMESAR, IMPERFECT ALTERNATIVES: CHOOSING INSTITUTIONS IN LAW, ECONOMICS, AND PUBLIC POLICY 102, 106–07 (1994).

^{59.} *Id.* at 108, chs. 3–5.

^{60.} *Id.* at 100, 103, 106–07, 109.

^{61.} *Id.* at chs. 3–5.

^{62.} MECHANISMS OF GOVERNANCE, *supra* note 55, at 7, 10, 13.

^{63.} Richman, *supra* note 4, at 762–66.

^{64.} Id. at 758.

costly because "it can only reach those who subscribe to it."⁶⁵ Richman's central premises that "all institutional arrangements exhibit certain efficiencies and costs" and that "[a] comparative assessment of public versus private enforcement requires assessing the institutional capacities of each mechanism"⁶⁶ follow directly from Macaulay's work on comparative institutional governance.

B. Institutional Choice and Comparative Governance: How Informal and Formal Enforcement Interact and Combine

Macaulay's comparative analysis of alternative institutions in exchange led scholars to new insights on why and how firms might combine their use of formal and informal enforcement. Parties no longer faced a binary choice between formal and informal enforcement; before Macaulay, the interest in how informal and formal mechanisms interacted had not been on the radar because it was assumed that law could effortlessly solve problems.⁶⁷ Accordingly, Macaulay's interest in nonlegal institutions opened up a richer world of informal enforcement. His foundational work delineated contexts where informal enforcement is likely to succeed and anticipated those in which it might need to be supplemented and also raised new questions about how informal and formal enforcement might interact.⁶⁸

Studies of the movie industry provide one example of the disparate use of formal and informal contracts in different contexts. Evidence shows that distributors rely on informal enforcement when opportunism risk is low due to the low revenue potential of certain movies but rely on formal contracts when risk of opportunism is high.⁶⁹ Thus, the choice is not always binary, and the parties' choices of formal and informal enforcement as competing governance strategies will depend on the

^{65.} *Id.* at 764.

^{66.} *Id.* at 763.

^{67.} See Mertz & Friedman, supra note 2, 15–17.

^{68.} Barak Richman situates Macaulay's informal adjustment as operating in the shadow of the law rather than wholly outside the legal system. *See* Richman, *supra* note 4, at 744 (citing Macaulay, *supra* note 4, at 62). The important contribution Macaulay made was to highlight informal enforcement. Although Macaulay contemplated law as a backstop, once informal enforcement became a variable, law might or might not play a role depending on the context. *See* Stewart Macaulay, *The Standardized Contracts of United States Automobile Manufacturers*, *in* STEWART MACAULAY: SELECTED WORKS, *supra* note 2, at 69 (discussing law as a last resort).

^{69.} Ricard Gil & Giorgio Zanarone, Formal and Informal Contracting: Theory and Evidence, 13 Ann. Rev. L. & Soc. Sci. 141, 149–50 (2017).

potential for opportunistic behavior. A choice for formal enforcement may also vary with "the strength of self-enforcement."

The choice between formal and informal enforcement, as institutional choices, will also depend on other factors such as whether a matter is verifiable to a court.⁷² An employer will pay a fixed wage based on output, a matter verifiable to a court.⁷³ But for non-verifiable matters that depend on effort,⁷⁴ the employer may pay a bonus that will depend on informal enforcement; this will depend on the continuity of relations and the difficulty of replacing the employee.

The pathbreaking work of Ronald Gilson, Charles Sabel, and Robert Scott (GSS) on the braiding of formal and informal enforcement follows directly from Macaulay's work. Like Macaulay, GSS assumed that formal contracts oriented to performance obligations were of limited value.⁷⁵ In Macaulay's case, the cost of legal enforcement rendered contract enforcement useless or counterproductive; in GSS's innovation contracts, performance obligations could not be devised because of the uncertainty regarding the ultimate innovated product.⁷⁶ Like Macaulay's business people, contractors in the GSS contracts turn to an alternative means of governance: they create formal information-sharing protocols to generate information that would facilitate informal enforcement, helping to "endogenize" trust.⁷⁷

Macaulay found a world in which parties in a set of relational contracts ignore formal contracts and rely on the institutional alternative of informal enforcement; his insights influenced GSS. Like Macaulay's businesspeople, parties in the GSS innovation contract do not rely on formal contracts for provisions that courts can enforce, so they share a distrust of legal centralism.⁷⁸ GSS's innovation contractors also turn to an alternative to formal contract enforcement and rely on information-sharing mechanisms as an institution that can generate the information needed for

^{70.} *Id*.

^{71.} *Id.* at 147 n.3 (citing Pierpaolo Battigalli & Giovanni Maggi, *Costly Contracting in a Long-Term Relationship*, 39 RAND. J. ECON. 352, 355, 363–64 (2008)).

^{72.} See Alan Schwartz, Relational Contracts in the Courts: An Analysis of Incomplete Agreements and Judicial Strategies, 21 J.L. STUD. 271, 279–80 (1992).

^{73.} See Gil & Zanarone, supra note 69, at 142–46.

^{74.} *Id.*; see also David E. M. Sappington, *Incentives in Principal-Agent Relationships*, 62 J. Econ. Persp. 45, 62 (1991).

^{75.} See Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, Contracting for Innovation: Vertical Disintegration and Interfirm Collaboration, 109 COLUM. L. REV. 431, 454–55 (2009).

^{76.} *Id.* at 448 (discussing the problem of "continuous uncertainty").

^{77.} Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, *Braiding: The Interaction of Formal and Informal Contracting in Theory, Practice, and Doctrine*, 110 COLUM. L. REV. 1377, 1386 (2010).

^{78.} See id. at 1397–98.

informal enforcement.⁷⁹ In Macaulay's world, the informal enforcement operates outside of formal contract,⁸⁰ but in the GSS world, a contract whose main function is to facilitate informal enforcement creates an information-sharing institution.⁸¹ By studying how informal enforcement could be created under conditions of trust and reputational sanctions, Macaulay led GSS to imagine different scenarios in which the preconditions for informal enforcement could be created through a formal contract that did not depend on enforcing performance obligations.

By exploring informal enforcement outside of contract as an alternative institution to formal contract enforcement, Macaulay prompted later studies of how informal and formal contracts might interact in ways that were inconceivable when legal enforcement sanctions prevailed as *the* solution to contract disputes.

C. Implication of Paradigmatic Institutional Choice: Functional Focus of Exchange

Macaulay's underlying analysis of parties' institutional choices led to a focus on contract, or its alternatives, as a means of conducting exchange. This reoriented contract scholarship away from a doctrinal to a functional focus.

By separating contract from legal sanctions and emphasizing contracts as devices for conducting exchange, scholars began to rethink contracts. Macaulay's emphasis on contracts as devices for conducting exchange, and his liberation of contract law from the coercive sanctions associated with classical contract law, caused scholars to rethink the role of contract in transactions.⁸² Parties might enter into contracts whose provisions were designed to create a "work-a-day" framework for resolving issues internally⁸³ and to keep law as a coercive sanction out of the exchange.⁸⁴ Law as risk allocation or as an enforcement mechanism for performance obligations became less important.⁸⁵

Macaulay emphasized choosing governance based on what strategy would best suit the relationship, which led others to rethink whether a new form of contract, conceptualized as a how-to framework for procurement, could itself serve as a low-cost alternative strategy to contract sanctions

^{79.} *Id.* at 1377, 1386.

^{80.} See Macaulay, supra note 1, at 62–65.

^{81.} Gilson, Sabel & Scott, *supra* note 77, at 1408–09.

^{82.} See, e.g., id. at 1387–88.

^{83.} Bernstein & Peterson, *supra* note 9, at 1, 40.

^{84.} *See* Email from Lisa Bernstein, Professor, Univ. of Chicago, to Juliet Kostritsky, Professor, Case W. Rsrv. Univ. (Mar. 1, 2020, 12:39 PM) (on file with author).

^{85.} Gilson, Sabel & Scott, *supra* note 75, at 449.

that could yield value to the relationship. 86 That functional focus influenced scholars like Jennejohn to consider how particular problems in an alliance, such as spillover, could be governed by an institution set up in a contract, such as unanimous committee decision-making. 87 This could solve a problem like misappropriation of intellectual property better than alternatives because it more clearly delineates the boundaries of foreground IP. 88 A functional focus driving institutional choice also influences contract design theorists like GSS, who see the contract information transfer mechanisms as institutions or structures as a functional solution to opportunism and uncertainty problems. 89

D. Private Governance: Facts, Origins, Examples, Purposes, and Limits

Macaulay's work on an alternate means of governance led scholars to explore how parties could operate by creating their "own rules." Macaulay made these self-regulating networks a fact to be reckoned with: He inspired studies of successful private governance which led to the view that private governance, is not only a fact, but a normatively superior way to conduct exchange. His work also led scholars to explore how parties could operate more effectively by creating private systems for enforcement and governance.

Macaulay's understanding of this expanded scope of informal governance inspired Lisa Bernstein's study of the diamond industry, 92 Robert Ellickson's study of the Shasta County cattle dispute mechanisms, 93 and Avner Greif's study of merchant traders. 94 Macaulay's work, however, did more than simply inspire studies of functioning private governance; it also caused scholars to address the fundamental questions of why private ordering arose and identify the preconditions for the success or failure of such governance.

- 86. See, e.g., id. at 449–51.
- 87. Jennejohn, *supra* note 49, at 323–28.
- 88. See id. at 324.

^{89.} Gilson, Sabel & Scott, *supra* note 75, at 448–51 (discussing the problem of "continuous uncertainty").

^{90.} Edward Rubin, *Empiricism's Crucial Question and the Transformation of the Legal System*, *in* Revisiting the Contracts Scholarship of Stewart Macaulay: On the Empirical and the Lyrical, *supra* note 6, at 74, 79.

^{91.} David Campbell provided this insight. See David Campbell, Commentary, The Incompleteness of our Understanding of the Law and Economics of Relational Contract, 2004 Wis. L. Rev. 645, 666–67, 675.

^{92.} Lisa Bernstein, Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry, 21 J. LEGAL STUD. 115 (1992).

^{93.} ROBERT C. ELLICKSON, ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES (1991).

^{94.} AVNER GREIF, INSTITUTIONS AND THE PATH TO THE MODERN ECONOMY: LESSONS FROM MEDIEVAL TRADE (2006).

Macaulay's focus on private governance through informal adjustment as an alternative institution to formal contract enforcement also launched the innovative work on contract design by scholars like GSS, Bernstein, and Jennejohn. Macaulay had imagined that developing social capital would occur entirely outside of contract in relational contracts. That foundational work led contract innovation scholars to study how governance techniques and institutions like information-sharing protocols could artificially create trust even where it was not preexisting or part of a relational contract. These governance mechanisms were institutions within contracts—and thus were different from Macaulay's informal adjustment outside of a contract—but they were not contractual since they were often not enforceable and did not depend on enforcing performance obligations. Macaulay's informal adjustment mechanisms, they were enforced informally through "interior-remedies" and operated outside of law.

Macaulay's view on the limits of legal enforcement influenced Williamson's recognition of "the limitations of legal centralism." Other scholars explain such governance as a response to lawlessness or weak enforcement by the state. On In eleventh-century international trade, when the central state was weak, traders employing agents over long distances needed to control divergence and shirking by those agents in order to prevent the losses in gains to trade. On Consequently, they developed practices to sanction cheating agents by using a collective private enforcement mechanism that prohibited traders from hiring any such agents. This practice was enforced using multilateral sanctions. Greif explained the rise of these arrangements in terms of transaction cost economics. The private alternate governance responded to the costs of complete contracts to govern the agent and the cost of legal enforcement. The system provided value to both traders and agents and

- 95. Macaulay, *supra* note 1, at 63.
- 96. See, e.g., Gilson, Sabel & Scott, supra note 77, at 1383.
- 97. See Bernstein & Peterson, supra note 9, at 3–5.
- 98. *Id.* at 3 n.9, 3–5.
- 99. Williamson, *supra* note 11, at 2.
- 100. See, e.g., Greif, supra note 94, at 10.
- 101. *Id.* at 58, 61–63.
- 102. Because information about cheating flowed through the merchant community, "the present value of the premiums [from future business] was larger than what an agent could gain by cheating, agents could credibly commit themselves to be honest, and merchants could trust them." *Id.* at 86.
 - 103. *Id*.
 - 104. Id. at 87
- 105. *Id.* at 85–86 ("The Maghribi traders' coalition mitigated problems of contract enforceability and coordination that arose in complex trade characterized by . . . inability to specify comprehensive contracts[] and limited legal contract enforceability.").

helped to prevent the losses that would otherwise occur. The comparatively superior ability of parties to solve problems better than generalist courts anchors Galanter's explanation for private governance. The unavailability of sanctions within certain relationships—like the intrafirm employer-employee relationship—explains why informal relational contract governance arises in that setting. The contract governance arises in that setting.

Macaulay's work on private governance not only explains why governance arises but also identifies the preconditions for its success. He emphasized a shared understanding of the parties' primary obligations and a standardized product. By identifying those core factors, Macaulay caused others to explore whether private governance could succeed under other conditions and, if so, whether the elements of private governance would be different. Would informal adjustment succeed in other settings, or would alternative institutions—such as formal information-sharing protocols or managerial provisions—work in new contexts of innovation in alliances? Macaulay's work on successful governance led others to systematically explore what factors make private governance possible, including repeat play, sanctioning capabilities, close-knit groups, and information transmission.

Although private governance is now seen as a fact, ¹¹⁰ Macaulay's view that institutions like contract and judicial remedies could fail and that other institutions would evolve in response to failure suggests that institutional choice will, too, evolve in response to that failure. ¹¹¹ This suggestion led others to examine not only the fact of failure but also to explore why and when failure would occur. ¹¹² Some factors influencing success or failure are organizational or bureaucratic, and some are based on behavioral proclivities, such as opportunistic behavior. ¹¹³ Institutions will adjust, and success may depend on other institutional supports.

^{106.} Ia

^{107. &}quot;In many instances the participants can devise more satisfactory solutions to their disputes than can professionals constrained to apply general rules on the basis of limited knowledge of the dispute." See Marc Galanter, Justice in Many Rooms: Courts, Private Ordering, and Indigenous Law, 19 J. LEGAL PLURALISM 1, 4 (1981), cited in Williamson, supra note 10, at 2.

^{108.} See Benito Arruñada & Giorgio Zanarone, Williamson and Relational Contracts, Soc'y for Institutional & Organizational Econ. (June 12, 2020), https://www.sioe.org/news/williamson-and-relational-contracts [https://perma.cc/964Z-BOSL].

^{109.} Macaulay, supra note 1, at 62.

^{110.} See Williamson, supra note 10, at 1–2.

^{111.} See Macaulay, supra note 1, at 62–65.

^{112.} See, e.g., Josh Whitford, The New Old Economy: Networks, Institutions, and the Organizational Transformation of American Manufacturing 99 (2005).

^{113.} *Id.* at 100–10.

Following Macaulay's insights into institutional failure, Josh Whitford pursued an analysis of why supply chain contracts could fail. 114 That happens when there is overreach by OEMs and suppliers respond by, in Whitford's words, "partial adoption" and hedging and withholding information. 115 Whitford found that failure may also be due to factional conflicts within an organization that make one party, who is theoretically committed to collaboration and information sharing, hold back. 116 These failures may be due to persistent contradictions within firms that undermine the success of these new institutions. 117

Macaulay's approach suggests that there are limits of private governance. His focus on the preconditions for the success of private governance, such as information transmission and credible sanctions, suggests that, when those preconditions are absent, private governance may fail or need to be supplemented. That may explain why institutions such as rating agencies arise when information transmission and sanctions are not present. High

E. A Renewed Interest in Norms

Macaulay's focus on two widely accepted norms, honoring commitments and producing a good product, fits into the institutional choice paradigm shift. These norms often render resort to the law unnecessary and reflect implicit methods of devising solutions to the problems of cooperation and exchange. Macaulay's scholarship laid the groundwork for viewing norms as implicit, instrumental, and institutional choices to solve problems when contracts or other devices are not available, too costly, or otherwise dysfunctional. The parties weigh the costs and benefits of governing their exchange by norms and compare those costs and benefits to other arrangements to determine the optimal

^{114.} Studies of the Boeing Dreamliner and other institutional failures directly follow from Macaulay's recognition that institutions can fail. WHITFORD, *supra* note 112.

^{115.} See id. at 100.

^{116.} Id. at 99.

^{117.} *Id.* at 101.

 $^{118. \}hspace{1.5cm} Avinash K. Dixit, Lawlessness and Economics: Alternative Modes of Governance 13 (2004) (ebook).$

^{119.} *Id.* at 22.

^{120.} Macaulay, *supra* note 1, at 63.

^{121.} Id. at 63-64.

^{122.} See, e.g., Juliet P. Kostritasky, The Law and Economics of Norms, 48 Tex. INT'L L.J. 465, 486 (2013).

^{123.} Included in the costs and benefits of adherence or non-adherence to a norm is the desire for esteem. Since parties desire esteem, they will adhere to widely accepted behavioral regularities resulting in a norm. See Richard H. McAdams, The Origin, Development, and Regulation of Norms, 96 MICH. L. REV. 338, 355 (1997).

mix of formal and informal arrangements."¹²⁴ This instrumental view of norms as problem-solving devices facilitated understanding norms as implicit ways parties can deal with other exchange problems, such as uncertainty. Accordingly, Macaulay's work influenced Douglass North to explore how norms can lower uncertainty by establishing "the framework within which human interaction takes place."¹²⁵

The focus on norms as problem-solving devices and institutions and cost-comparative analysis influenced scholars to postulate that particular norms regarding standardized weights and measures could also reduce the costs of exchange and increase gains from trade. Other scholars saw norms as solutions to collective action problems and a means for finding cost-effective solutions to joint problems; in short, they thought norms could create solutions to the driving coordination problem.

Macaulay's interest in norms as governance institutions in exchange launched other scholars to inquire into how norms affect behavior. When norms exist, parties calculate the "costs and benefits of particular behaviors." If the party deviates from a norm, that non-adherence will result in lost opportunities and possible reputational losses; norms influence how to resolve an encounter or dispute with another party. These calculations affect whether the norm will work as a problem-solving institution. Macaulay's insights into norms explained how norms could influence behavior, as parties would calculate the costs of non-adherence when reaching an informal adjustment.

Norms thus function as one private governance institution to solve problems. At the same time, norms raise a question at the heart of all institutional choice: when will/should the parties invoke law, or, as Saul Levmore asks, what is the proper institutional "division of labor between law and norms?" Answering that question, one of whether law should intervene to enforce norms or, alternatively, one to see how norms might supplement contractual arrangements, requires an assessment of institutional choice at the heart of the paradigm shift. To resolve the intervention question, one must account for the fact that "each norm may achieve those goals in different ways in particular contexts, depending in part on the costs of alternative arrangements . . . and the particular advantages and disadvantages of each solution in such contexts." Once norms are seen as part of an exchange and governance, it becomes

^{124.} Kostritsky, *supra* note 122, at 469.

^{125.} NORTH, supra note 7, at 4.

^{126.} See, e.g., id. at 29.

^{127.} See, e.g., Kostritsky, supra note 122, at 499.

^{128.} Robert E. Scott, *The Limits of Behavioral Theories of Law and Social Norms*, 86 VA. L. REV. 1603, 1618 (2000).

^{129.} Saul Levmore, Norms as Supplements, 86 VA. L. REV. 1989, 1989 (2000).

^{130.} Kostritsky, *supra* note 122, at 483 (describing the factors that affect the goals of joint problem solving and maximizing gains from trade).

paramount to study norms, contract, and law to see how they coexist, interact, substitute for, and displace one another. Macaulay's view of comparative institutional governance provides a rich ground for analyzing the normative interactions between law and norms.

One example in which a comparative institutional analysis suggests that law might have a comparative advantage over norms or contracts exists where impediments hinder parties from solving an externality problem—such as the removal of dog waste by dog owners—either by contract or by informal norm. Because the parties are not interacting and cannot develop a shared norm or contract, the law may intervene to ban dog waste. That in turn will generate norms of social enforcement. Thus, where the preconditions for informal enforcement are not possible, an alternative may be the better option.

Macaulay's comparative institutional assessment can also help determine whether the law should mandate the incorporation of certain norms into contracts. Sometimes the law will decline to incorporate a tipping norm into an enforceable contract because that option would be less beneficial. A tipping norm can supplement a private contract of a restaurant that incentivizes good service and allows patrons to distinguish between levels of service. The alternative of a law-mandated gratuity would result in restaurants paying too much to some waiters and not enough to others since it would not distinguish effort levels. 133

II. THREE MORE EFFECTS BEYOND THE INSTITUTIONAL CHOICE PARADIGM

Macaulay's work contributes to three other developments that represent lasting legacies of his scholarship. They include a more realistic model of exchange, the focus on context, and a broader role for lawyers. All of these developments are important in their own right, but they also tie into the institutional choice paradigm discussed earlier. 134

A. More Realistic Model of Exchange

Macaulay's view that parties would choose institutions that would best achieve their goals and that they would choose informal governance when the cost of legal enforcement outweighed any advantages emphasized that there are costs to legal enforcement.¹³⁵ That revealed an imperfect world of exchange in which information and enforcement are

^{131.} Levmore, *supra* note 129, at 1994 & n.7.

^{132.} Id. at 1991.

^{133.} Kostritsky, supra note 122, at 487.

^{134.} See supra Part I.

^{135.} Macaulay, *supra* note 1, at 64.

not costless. Macaulay's empirical investigation into how businesses actually conducted their exchange emphasized how important realistic assumptions about human behavior are in devising solutions to an exchange problem. That recognition of the cost of legal enforcement as an obstacle prompted examination of other possible frictions and transaction costs in an exchange. 136 These frictions occupied the neo-institutionalists and scholars of behavioral economics and led to explorations of multiple impediments to contracting, the inevitability of incomplete contracts, and possible solutions with institutional implications. 137 This work thus suggests the relevance of behavioral economics and a deviation from the assumptions of classical economics that had focused on prices and the competitive structure of markets to lead rational parties to secure the information needed to maximize their utility. 138 In this world of costly enforcement and imperfect information, Macaulay's focus on alternative institutions is important because they matter in this imperfect world. Parties weigh the advantages and disadvantages of various solutions but do so in the context of frictions and imperfect enforcement.

B. Context, Institutional Choice, and Contract Interpretation

Macaulay's emphasis on context¹³⁹ and the details of the relationships of the businessmen he studied influenced others to tie particular contexts to institutional choices, just as he had implicitly done in linking the institutional choice of informal adjustment to the context of continuing relations.¹⁴⁰ Economic historians followed Macaulay in studying how context affected the choice of institutions in the wheat industry.¹⁴¹ Wheat sacks originally identified the farmer, and buyers could purchase wheat based on the reputation of the farmer.¹⁴² As the wheat trade expanded across greater distances and wheat was shipped in railroad cars, buyers could no longer identify the farmer, leading to an adulteration of wheat quality.¹⁴³ To stop the drop in prices and prevent a lemons problem,¹⁴⁴ this

^{136.} These costs are ones that arise in the real world and were largely ignored by economists, like Adam Smith, who had focused on specialization and its effects on productivity, thereby ignoring the costs of exchange brought about by the underlying institutions. Coase, *supra* note 3, at 73.

^{137.} Schwartz, *supra* note 72, at 271–73, 315–16.

^{138.} Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1476–77 (1998).

^{139.} See generally Bix, supra note 8, at 247–50.

^{140.} Macaulay, *supra* note 1, at 61, 63.

^{141.} See generally Lamoreaux, Raff & Temin, supra note 21, at 414–16.

^{142.} *Id.* at 414.

^{143.} *Id.* at 414–15.

^{144.} A "lemons problem" exists where the returns for marketing good quality products are disbursed to a group of sellers rather than the individual seller. Thus, there is "incentive for sellers to market poor quality merchandise." George A. Akerlof, *The Market*

new context generated new institutions. For example, the Chicago Board of Trade developed standards for wheat quality.¹⁴⁵ A new institution of government inspectors also developed to ensure objectivity and prevent adulterated wheat.¹⁴⁶ Therefore, both of these institutions developed to solve a problem that could no longer be solved by reputational sanction. Another example where context also matters in institutional choice is in the diamond industry, where an interest in secrecy and the perception that expectancy damages were inadequate led the industry participants to an embrace of arbitration outside the legal system as the preferred institutional governance mechanism.¹⁴⁷

However, in other contexts, where there is a lack of shared understanding of the product required because it is new and there is no preexisting trust, the informal relational adjustment envisioned by Macaulay may not work, and a new institutional structure could be required. Accordingly, parties in the innovation context have adopted "information sharing" protocols. ¹⁴⁸ These institutional protocols solved a problem that the particular context of advanced manufacturing required: the need to monitor quality and promote early detection of problems through simultaneous engineering and benchmarking. ¹⁴⁹ These protocols also fostered "shared understandings" of what was required and thereby promoted the ability to informally enforce those expectations. ¹⁵¹ Formal contract provisions responded to the context of uncertainty innovation contracts by creating elements that are necessary preconditions for informal enforcement.

Relatedly, this focus on context has led scholars to argue that companies that can "develop automation methods that capitalize on their greater access to the context in which production data is generated" have a comparative advantage over digital entrants. Thus, the same idea that context affects institutional choice can also be used to analyze how value can best be captured from digital information and sensors on equipment. For example, how can a manufacturer use the data generated from robotics

for "Lemons": Quality Uncertainty and the Market Mechanism, 84 Q.J. Econ. 488, 488 (1970).

^{145.} Lamoreaux, Raff & Temin, supra note 21, at 415.

^{146.} *Id*

^{147.} Bernstein, *supra* note 92, at 116.

^{148.} Gilson, Sabel & Scott, supra note 77, at 1377.

^{149.} Susan Helper, John Paul MacDuffie & Charles Sable, *Pramgatic Collaborations: Advancing Knowledge While Controlling Opportunism*, 9 INDUS. & CORP. CHANGE 443, 445–46 (2000).

^{150.} Gillian K. Hadfield & Iva Bozovic, Scaffolding: Using Formal Contracts to Support Informal Relations in Support of Innovation, 2016 Wis. L. Rev. 981, 986.

^{151.} Gilson, Sabel & Scott, supra note 77, at 1402 n.72.

^{152.} Susan Helper, Raphael Martins & Robert Seamans, Who Profits from Industry 4.0? Theory and Evidence from the Automotive Industry (unpublished manuscript at 1) (on file with the author).

and sensors to "capture value"? This is a type of institutional choice. If the manufacturer can utilize the knowledge from the floor and combine it with the digital information, it may be able to capture value in a superior way. Macaulay's focus on context, institutional choice, and comparative cost laid the foundation for Susan Helper and others to assess the different ways companies can make use of information from sensors and robotics. ¹⁵³ Which way will be best to capture value? If a company uses information but does not use local knowledge, it will not capture as much value as if it had enriched itself with local knowledge from the shop floor. That may lessen its comparative advantage vis-á-vis digital entrants who translate the data into abstract formulations that can be used across a variety of industries.

Context also affects not only what institution parties will adopt but also whether informal adjustment as an institution will succeed or not. Tom Palay uses Macaulay's insights on the importance of context to explain why informal adjustment may not always succeed.¹⁵⁴ Where the parties' investments are disparate,¹⁵⁵ the investment that could otherwise serve as a hostage and curb opportunistic behavior will break down.¹⁵⁶ That focus on context has implications beyond contract design and institutional choice; it affects whether courts should normatively adopt a formalist or a contextualist approach to contract enforcement and interpretation. A justification for incorporating tacit assumptions and customs or trade usages ties back to Macaulay's comparative institutional choice structure. In some instances where parties leave tacit assumptions out of the contract, courts may have a comparative advantage in filling those terms.

Although Macaulay did not fully develop a model for supplying terms for incomplete contracts, his model of comparative advantage for analyzing institutional choice suggests that where there are frictions or obstacles to parties incorporating the tacit assumptions or customs and the court can, by incorporating them, yield more advantages than disadvantages, it should do so. The question is whether supplying a term will reduce costs for the parties by more than any costs introduced by such

^{153.} *Id.*; supra notes 133134, 139140 and accompanying text.

^{154.} Thomas M. Palay, *A Contract Does Not a Contract Make*, 1985 WIS. L. REV. 561, 564. Palay offers several reasons why focusing on the context of the relationship, not the contract document, will mean we can "understand what actually transpired between the parties." *Id.* at 561–62. According to Palay, it was context, not the contract pricing term, that mattered in *Aluminum Co. of Am. v. Essex Group, Inc. (Alcoa)*, 499 F. Supp. 53 (W.D. Pa. 1980). Palay, *supra* note 154, at 562. That focus on context mirrors Williamson's focus on idiosyncratic investment as a crucial factor in relationships. *Id.*

^{155.} Palay studied this in the context of Alcoa. Palay, supra note 154, at 562–63.

^{156.} As Palay explains, "[h]ow parties structure the monitoring, adaptation, and enforcement of the contracts depends upon the characteristics of the underlying transaction." *Id.* at 562. Palay cited the context of disparate investment in *Alcoa* to explain why party adjustment failed despite a long-term relationship. *Id.* at 563.

terms and enhance welfare. This is the same calculus parties use to determine if one institution—contract enforcement—will result in more net benefits than another institution—the non-use of contract.

C. The Role of the Lawyer and Institutional Choice Paradigm

Renewed interest in institutions and their role in contract governance suggest that lawyers should have a broader role in advising clients. Instead of solely focusing on risk allocation provisions, lawyers need to understand the institution of the firm, factional conflicts, and management. They need to focus on whether investments in the supply chain are reciprocal. They need to understand network governance. They need to be sensitive to bureaucratic conflicts at a business, as those conflicts may affect performance. All will affect the success of exchanges.

Recognition of the importance of informal adjustment, debunking the centrality of contract law, and the disinclination to consult contract documents or invoke legal sanctions suggest that lawyers need to play a broader role that is not geared toward formal legal enforcement of performance obligations and recognizes other institutional solutions to durable problems. One scholar has suggested that lawyers have to shift their focus away from contractual incentives and risk allocation to understanding the "management strategies used within firms to improve the operation of outsourcing agreements." ¹⁵⁷

Lawyers may also want to advise clients on the possibility of failure with framework contracts that are ideally designed to promote innovation and coordination and control opportunism. Institutions exist to serve certain needs, like reducing opportunism, but when the institution fails to achieve those purposes, parties will devise other governance structures to mitigate those hazards. When large OEMs act opportunistically to abuse the information shared by suppliers, suppliers will adopt a private strategy, such as hedging, to protect themselves.

The sensitivity to the ways in which institutions or governance may fail derives from Macaulay's key theory that contract sanctions may fail as a device to govern contractual relationships.¹⁵⁸ That insight into how relationships fail may propel the lawyer into a new role. Instead of focusing solely on contract provisions that specify performance, the lawyer may advise the client that it is important to examine whether the investments made by both parties in a supply relationship are reciprocal. Are the investments made or hostages furnished in a supply relationship of equal value? If not, when circumstances change and prices rise exponentially, the adversely affected party may not have the leverage needed to force a concession if the hostage or investment furnished by the

^{157.} Bernstein & Peterson, supra note 9, at 40.

^{158.} Macaulay, *supra* note 1, at 56.

counterparty is not significant. The lawyer's role should be expanded to advise clients on why a reciprocity of investments may matter at the adjustment stage.

Macaulay focused on the way that real people operate, how real businessmen operate, and how real individuals operate within firms. With some personnel more inclined to emphasize contract provisions (finance people) and other individuals (sales personnel) less inclined to emphasize contract, "micro-level incentives facing the employees and managers of both the buyer and the supplier" matter. Lawyers advising clients must sensitize them to the possibility that these conflicts between individuals with differing priorities at a firm can adversely impact the operation of the contract as (one's client) will have to navigate dysfunction created by tensions between different categories of personnel. Life

CONCLUSION

Macaulay's empirical work established that contract law was only one variable among others that parties could choose to govern their exchange relationships. That choice in governance lens led to a paradigm shift in which contract went from being the inevitable and costless way of governing exchange to one in which comparative institutional governance concerns determine when parties choose one institution over another. It also influenced scholars to study private governance systems to determine why they arose, the preconditions for success, and the potential for failure. It also engendered studies of how informal and formal enforcement could combine and interact while exploring when formal enforcement might need to supplement informal enforcement. Macaulay's focus on two widely accepted norms led to studies of how norms might operate to solve the problems of cooperation and exchange. Macaulay's recognition of cost in parties' choices in institutional governance influenced more realistic models of exchange. His focus on how the context of relational contracts influenced governance in exchange led others to study how other contexts influenced institutional choices across a wide spectrum, from the wheat industry to innovation contracts. Finally, Macaulay's institutional paradigm shift suggests a broader role for lawyers who must pay attention to networks and other informal enforcement mechanisms that might replace formal sanctions.

^{159.} Bernstein & Peterson, supra note 9, at 40.

^{160.} WHITFORD, *supra* note 112, at 112, 115 (noting "inconsistent incentives, departmental infighting and factional disagreements over firm strategy").